

Program to Exchange

.model small

.data

a db 11h, 13h, 15h, 17h, 19h

b db 20h, 22h, 24h, 26h, 28h

.code

mov ax, @data

mov ds, ax

lea si, a

lea di, b

mov cl, 05h

L: mov al, [si]

 xchg al, [di]

 mov [si], al

 inc si

 inc di

 loop L

mov ah, 4ch

int 21h

end

Program to Add with Carry

.model small

.data

num1 db 12h, 34h, 56h, 78h

num2 db 12h, 34h, 56h, 78h

res db 4 dup(?)

.code

mov ax, @data

mov ds, ax

mov si, 03h

mov cl, 04h

clc

deciadd: mov al, num1[si]

 adc al, num2[si]

 daa

 mov res[si], al

 dec si

 loop deciadd

 mov ah, 4ch

int 21h

end

Program of decimal adjust after addition

- model small

- data

a db 78h

b db 80h

- Code

mov ax, @data

mov ds, ax

mov al, a

add al, 80h

daa

mov ah, 4ch

int 21h

end.

Program of Subtraction with borrow

- model small

- data

num1 db 78h, 65h, 43h, 21h

num2 db 12h, 34h, 56h, 78h

res db 4 dup(?)

- Code

mov ax, @data

mov ds, ax

mov si, 03h

mov cx, 04h

cld

decisubb : mov al, num1[si]

sbb al, num2[si]

das

mov res[si], al

dec si

loop decisubb

mov ah, 4ch

int 21h

end.